Mt. Elgon Conservation and Development Project

Draft Only

Participatory Techniques For Community Conservation

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Participatory Techniques For Community Forestry:

A Field Manual

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Part 0 Introduction

1 Who Is This Manual For?

Community conservation, like other forms of participatory natural resource management, calls for participatory techniques that:

➔ allow field workers to collect and analyse information about complex natural and human ecosystems;

➔ promote the participation of local people in forest management; and

➔ increase the capacity of local people to manage their own problems.

Participatory techniques involve more than just extending technical information to local communities. They require field workers to work in partnership with local communities to identify local problems and seek locally viable solutions to those problems. This manual provides a source book of ideas about 'participatory' techniques. It is designed for program managers and field workers involved in community forestry. It is **not a blueprint** for action. Manuals of participatory techniques should be used as a basis to develop tools and methods that are relevant to local situations. They should not be used as foolproof guidelines that need to be followed strictly.

2 How To Use This Manual

To make the manual less intimidating to new practitioners, and easier to find information, it is divided into four parts as follows:

Part 1 answers some common questions about participatory techniques for community conservation. Use this part as a quick reference guide and to find out where to look for more detail.

Part 2 describes Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA) **approaches** and sets them in the context of community conservation. Use this part to gain an understanding of why participatory approaches are important and how they can be used most effectively.

Part 3 outlines some RRA and PRA **tools** that can be used for community conservation and, highlights how these tools can be used and provides cautionary remarks. Use this part as a detailed reference guide to find suggestions on how to use participatory tools in the field.

Part 4 A list of references and suggested readings are attached.

Part 1 Questions and answers about participatory techniques

What are participatory techniques?

Participatory techniques cover a wide variety of approaches, tools and methods that can be used in collaboration with local people to gather information about local conditions. Some participatory techniques are suited to gathering information, others are designed to promote people's participation. The two main participatory techniques described in this manual are Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA). Both RRA and PRA are designed to facilitate interaction between field workers and local people.

What is meant by RRA and PRA and how do they differ?

RRA, or Rapid Rural Appraisal, emphasises the importance of learning rapidly and directly **from** local people. RRA involves tapping local knowledge and gaining information and insight from local people using a range of interactive tools and methods. PRA, or Participatory Rural Appraisal, involves field workers learning **with** local people with the aim of facilitating local capacity to analyse, plan, resolve conflicts, take action and monitor and evaluate according to a local agenda. *For more information on RRA and PRA see Part 2.*

How do RRA and PRA differ from more conventional approaches such as questionnaire surveys and forest inventories?

Conventional approaches to collecting information generally involve field workers collecting information through questionnaire surveys and formal forest inventories. Experience has shown that conventional methods of gathering information in rural settings commonly fail to provide timely, reliable, cost-effective and useful information. RRA and PRA approaches differ from conventional approaches in that field workers learn from local people directly. They tap local knowledge and gain information and insight from local people using a range of interactive tools and methods. Properly applied, RRA and PRA will yield locally relevant, timely, reliable, cost-effective and useful information. *For more information on RRA and PRA see Part 2.*

What are the common RRA and PRA tools available for field workers?

Because many PRA tools can also be used in RRA' new practitioners are often confused about when and how to use the tools. The difference between RRA and PRA is that PRA aims to catalyse local capacity to deal with local problems through field workers learning with local people. In contrast, RRA involves field workers learning from local people according to the field worker's agenda. RRA does not necessarily involve facilitating local capacity or empowering local people to act.

The common RRA tools include building rapport, cross-checking, semi-structured interviews, group meetings and workshops, sketch mapping and direct observation. In addition, forest profile by rapid assessment has been developed specifically for community forestry. The common PRA tools include building rapport, ranking, time charts, semi-structured walks, participatory mapping, participatory use of photographs, group meetings and workshops and direct observation. *Details of RRA and PRA tools are given in Part 3.*

How do I decide which participatory technique to use?

The choice of technique depends on the circumstance. As a general rule RRA is used to learn rapidly from local people and PRA is used when field workers need to empower local people to manage natural resources. RRA is particularly useful when field workers are planning for the efficient use of their own resources (finances, human resources and time), and when exploring the prospects for working in a local area. PRA should not be used during the earliest stages of community conservation investigations unless field workers are prepared to continue to support the forest user group after local interest has been raised. *Details of RRA and PRA tools are found in Part 3. Details of how to combine the tools into participatory methods are found in Part 4.*

How can RRA and PRA help me to prepare a work plan?

RRA is a very useful approach when field workers need to plan the use of their resources (finances, human resources and time).. RRA allows field workers to collect reliable and useful information from local people rapidly. PRA should generally **not** be used for work planning as the intention is not to empower local people but to plan for the efficient use of Departmental resources. *Details of the use of RRA methods in Range Post Planning are found in Part 4.*

How can RRA and PRA help me to facilitate collaborative management planning?

Both RRA and PRA approaches are used in facilitating Forest User Group planning. Before field workers can empower a forest users with the rights and responsibility for collaborative management they need to collect social and physical resource information about the local area and the people who live there. RRA can be used for this without unduly raising the expectations of local people. When the legitimate forest users have been identified and field workers have a feel for the local situation PRA approaches can be used. *Details of the use of RRA and PRA methods in collaborative management planning are found in Part 4.*

Are participatory methods useful for monitoring community forest management?

Participatory methods are ideal for encouraging collaboration between field workers and forest users in monitoring community forest management. Many PRA tools can be used by forest users themselves to monitor the condition of their community forest or the activities of the forest users. RRA techniques are useful for field workers to monitor activities that the Uganda Wildlife Authority may have an interest in even if the forest users do not; for example, biodiversity monitoring. *Details of the use of RRA and PRA methods for monitoring community forestry are found in Part 4.*

Part 2 Participatory approaches for community conservation

1 Background

Field workers sometimes have difficulties promoting the participation of local people in forest management. Often this is because the term 'participation' means different things in different situations.

To promote participation in community conservation, field workers need to:

➔ consult with local people about community forestry issues;

➔ encourage collaboration between forest users and the government; and

➔ empower local people with the rights to use and manage forest use in a manner consistent with local interest and the objectives of the community conservation program.

For the purpose of this manual, we have classified participatory techniques into participatory *approaches, tools* and *methods*. These three terms refer to three distinct but interrelated aspects of participatory action. By 'approaches' we mean the overall procedures adopted for collecting information and working with local people. Community conservation requires approaches that involve local people as participants in the collection, analysis and use of information. Two approaches that do this are Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA). An alternative approach is Participatory Learning and Action (PLA) which incorporates elements of RRA and PRA but does not imply that the approach is rapid, can only be undertaken in rural settings or only involves appraisal. We have chosen to use the terms RRA and PRA as they are still widely used by field workers and in the literature. We recognise that the terms RRA and PRA can be misleading, however.

By 'tools' we mean specific RRA and PRA techniques that field workers use to collect information and facilitate people's participation. The tools are detailed in Part 3 of this manual. By 'methods' we mean the selection, timing and sequencing of RRA and PRA tools in particular ways to meet the needs of community conservation. The methods are detailed in Part 4 of this manual.

2 The Role Of Field Workers

Two types of information are needed to implement community conservation programs. These are **physical resource** information and **social** information. Physical resource information includes such things as the location, area and condition of forests, shrublands and grasslands. Social information includes such things as the nature of rural communities and forest users, their interests, needs and preferences, and the existing arrangements for using and protecting forests. Although physical resource information is important, it is the social information that provides the key to successful community conservation.

3 How Can Field Workers Collect Information?

Conventional methods of gathering information in rural settings, such as questionnaire surveys and formal forest inventories, can fail to provide timely, reliable, cost-effective and useful information for implementing community conservation. Such highly formal methods are unnecessary and inappropriate at this stage in the development of community conservation.

Approaches, tools and methods that involve local people as participants in collecting and using information provide better alternatives to conventional surveys and inventories. The following section describes the approaches referred to as Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA). RRA and PRA are simply labels for approaches that emphasise the importance of learning directly from and with local people.

Rapid Rural Appraisal (RRA)

Rapid Rural Appraisal (RRA) refers to a set of approaches that emphasise the importance of learning rapidly from local people directly. RRA involves tapping local knowledge and gaining information and insight from local people using a range of interactive tools and methods. RRA differs from conventional approaches that involve field workers measuring things in the field on their own. RRA approaches are participatory in the sense that field workers consult with local people while collecting data. However, a basic principle of RRA is that field workers learn and obtain information, take it away and analyse it. In this respect RRA is extractive in that information is gathered and used according to the needs and agendas of the field workers. RRA is founded on a number of principles and findings, such as:

➔ highly formal and conventional methods of gathering information commonly fail to provide timely, reliable and cost-effective information for rural development planning;

- ➔ brief, unstructured field visits by field workers can give rise to biases that undermine the usefulness of information collected during such visits;
- ➔ local people do not need to be interviewed formally to obtain useful information. This can be done by using informal tools such as conversations, direct observations and mapping;
- ➔ there is great value in field workers staying in the field for extended periods and undertaking unhurried observations and conversations with local people;
- ➔ the attitudes and behaviour of field workers and local people are important factors in the quantity and reliability of information that can be obtained; and
- ➔ local knowledge has great validity and usefulness for community conservation and such knowledge can be obtained using an RRA approach.

For field workers, RRA provides an efficient and reliable means of rapidly collecting relevant information from local people that can be used for:

- ➔ setting priorities for the efficient use of Department resources;
- ➔ collecting detailed information from local people about the size and condition of local forests and the nature of communities who use those forests;
- ➔ identifying who has the right to use a forest; and
- ➔ collecting detailed information about forests and forest users for the purposes of monitoring and evaluating community conservation programs.

RRA allows field workers to learn from local people before they initiate action to empower these people. This helps to avoid incorrect identification of the forest users. Some people argue that RRA requires an inter-disciplinary team. In routine community conservation work inter-disciplinary teams are usually impractical due to financial and other constraints. This is not a serious problem provided that field workers realise that they need to collect social and technical information and adopt an inter-disciplinary approach to field work.

Participatory Rural Appraisal (PRA)

Robert Chambers (1992) describes Participatory Rural Appraisal (PRA) as '... a family of approaches and methods to enable local people to share, enhance, and analyse their knowledge of life and conditions, to plan, and to act.' In other words, PRA approaches involve field workers learning **with** local people. Field workers act as facilitators to help local people conduct their own analyses, plan and take action. The ultimate aim of PRA is to empower local people with the capacity to plan and take action towards improving their own situation.

PRA is based on the following principles:

➔ local people are creative and capable and can do their own investigations, analyses and planning;

➔ field workers have a role as facilitators of rural development; and

➔ local people should be empowered to solve their own problems themselves.

The basic difference between RRA and PRA approaches is that RRA seeks to obtain reliable and useful information from local people for use by field workers through a participatory approach, while PRA seeks to facilitate learning, planning and action by and for local people. In either case, field workers need to be aware of:

➔ the characteristics of good RRA and PRA;

➔ the potential dangers associated with the adoption of such approaches; and

➔ the role of RRA and PRA in community conservation and some broad guidelines describing when specific tools and methods might be appropriate.

Characteristics of good RRA and PRA

Appropriate behaviour and attitude of field workers is the key to successful RRA and PRA. Good RRA and PRA are characterised by behaviour and attitudes that include:

➔ building rapport with men and women, rich and poor, young and old and people in different ethnic or social groupings;

➔ being aware of potential suspicions and taking action to dispel them;

➔ being friendly, interested, culturally sensitive, relaxed, and open; → avoiding placing people in situations in which they feel uncomfortable;

➔ listening and probing and leaving space in conversations for additional comments;

➔ avoiding using RRA and PRA tools in a mechanical way by selecting tools to suit local circumstances;

➔ taking advantage of local events and activities rather than staging events and activities;

➔ engaging in conversations that have a two way exchange of information;

- ➔ being patient but proceeding at a moderate pace;
- ➔ seeking the views of the weaker, less powerful people or groups;
- ➔ sharing information;
- ➔ giving people time to communicate and consider ideas;
- ➔ being self-aware and self-critical, using your own judgement, concealing personal biases;
- ➔ learning from people, not lecturing;
- ➔ checking and rechecking the validity of information using different sources;
- ➔ frequently reflecting on what information has been gained and where the gaps are;
- ➔ identifying and testing assumptions;
- ➔ embracing error;
- ➔ trying to ensure that people's expectations are not raised too early;
- ➔ recognising that not all RRA and PRA tools are suited to all situations or all social groups;
- ➔ asking questions that invite explanations or viewpoints rather than yes or no answers; and
- ➔ scheduling RRA and PRA activities so that they fit in as far as possible with seasonal and daily routines of local people.

RRA and PRA are not panaceas for facilitating community conservation or rural development. While they are valuable approaches they have limitations. Field workers need to be aware of the potential dangers associated with RRA and PRA.

Potential dangers associated with adopting RRA and PRA approaches

The potential dangers of adopting RRA and PRA approaches are that they can be:

- ➔ misused through superficial adoption of methods in the absence of complete understanding and adequate training;
- ➔ seen as a replacement for other forms of investigation and study even in situations where more formal or analytical research is called for;
- ➔ rushed if they are seen as providing shortcuts, thus yielding unreliable information;
- ➔ disruptive to social routines in the village;

- biased towards local people who have time and motivation to talk to field workers;
- time consuming if done properly;
- biased towards those people who appear to have knowledge; and
- either facilitated in a highly formalised way, or applied too rigidly and repetitiously which reduces their potential effectiveness.

These dangers must be been taken into account when using this guide and applying the suggested methods and tools in the field.

Using RRA and PRA for community conservation

RRA and PRA require a flexible approach. RRA and PRA tools and methods, and the sequence in which they are used should not be highly prescribed. Using RRA and PRA tools and methods as a blueprint for action suppresses innovation by field workers. Such innovation is essential to learning from and with local people.

RRA methods and tools are suited for use by field workers when they are planning how to allocate their own resources (time, finances and human resource) and investigating community conservation. Field workers should not attempt to empower local people until they have enough information to understand the physical and social situation relevant to negotiating collaborative agreements. When field workers begin to negotiate collaborative management arrangements, the approach should be PRA because the group of local people who will implement agreements have to be empowered to plan and act according to their interests and capacities. Field workers should also use PRA tools and methods while implementing, monitoring and reviewing community conservation activities. Some RRA tools can also be used in these stages of community conservation to collect information that is not essential to, or required by, the forest users themselves.

A great deal of care is needed when using PRA to ensure that short cuts are not taken. Field workers are often very busy and they sometimes find it easier to deal with people who have the time and interest to participate in PRA exercises. As a consequence, women, the elderly, the young, the poor and ethnic minorities are often ignored in PRA exercises. Field workers need to be sensitive to the dangers of empowering only one section of a local community. Good PRA often takes a long time and demands patience and commitment. Field workers need to ensure that they:

- ➔ share information with local people;
- ➔ use participatory tools in a flexible way; and
- ➔ take care to use the most appropriate tools for the circumstances. For example, there is little point in using participatory mapping to collect information on topography if a detailed topographic map exists for the area.

Part 3 RRA and PRA tools for community conservation

This part of the manual provides descriptions of how to use a number of RRA and PRA tools in community conservation. Differentiating between RRA and PRA tools is often difficult as many PRA tools can be used in a RRA mode. As a general guideline, the following applies:

- ➔ RRA involves field workers learning rapidly and directly **from** local people by tapping local knowledge and gaining information and insight from local people. In RRA field workers decide what information is to be collected, how and when. They use this information to plan and undertake future activities. RRA tools do not require local people to develop a sense of ownership for collecting or analysing the information.
- ➔ Field workers use PRA tools to learn **with** local people and to share knowledge and experience. PRA emphasises empowerment of and equity amongst local people. PRA involves field workers in facilitating local capacity to analyse, plan and take action according to a local agenda.

1 Building Rapport

Field workers must build up trust with a wide cross section of local people to work effectively. This process is called **building rapport.** The objectives of building rapport are to develop communications and establish working relationships with local people. Building rapport is not only polite, but it helps overcome suspicions and makes future work easier. Building rapport can be particularly difficult where there are language, cultural or religious differences between field workers and local people

Building rapport with rural women is particularly important. Women are often overlooked when forest issues are being discussed, in spite of the fact that they are often the most frequent and important users of forests and forest products. Although village women are often shy with people from outside their community, particularly men, both male and female field workers can successfully build rapport with women by being patient, tactful and resourceful.

How to use the tool

To build rapport, field workers should:

- meet with village leaders and local officials when beginning work in a rural area to dispel suspicion. However, building rapport should not stop with just meeting these people;
- begin working with local people who are more approachable and have less to fear from field workers; for example, older people, shopkeepers and village health workers;
- clearly explain reasons for coming to the area to a wide cross-section of local people, both men and women;
- show genuine interest in local issues;
- choose times and locations that are convenient for local people;
- ensure that men in a village understand motives for wanting to talk to women; and
- adopt the behaviours and attitudes of good RRA and PRA (see Part 2).

Cautionary remarks

- building rapport can be a slow process, be patient. Initially avoid asking too many detailed questions that may arouse suspicion and slow the rapport building process
- remain impartial and avoid becoming aligned with local factions
- avoid making unrealistic promises
- rural women are often busy, and they are often shy with strangers, regardless of whether they are men or women. Building rapport requires persistence.

Figure Part 3 -1 A field worker building rapport with forest users

2 Cross-checking

By using a combination of the tools described below field workers can build up an accurate picture of the situation in a village. It is important that field workers do not rely on a single source of information but cross-check to verify information and establish whether all necessary information has been collected. Cross-checking is also known as triangulation.

How to use the tool

To verify and cross-check information field workers should:

- develop a checklist of issues (what to collect)
- for each issue write down ideas on how to collect information;
- use the checklist as a reminder when undertaking field work; and
- keep good records on where information came from and how confident you are with the accuracy of information.

Cautionary remarks

- Field workers should use a variety of techniques that provide information to enable cross-checking.
- Field workers should recognise that an alternative source of information will not necessarily yield more accurate information. Each source of information is subject to potential bias. It is best to use at least three different sources of information when cross-checking.
- Cross-checking can be a slow process, be patient

3 Key Informants

Some people, like village elders, local leaders or school teachers, are very knowledgeable about forests and local needs and interests. These people are valuable sources of information, they are called **key informants**. The objective of using key informants is to collect information and gain useful insights into issues in a short period of time. Such information and insights can be used to develop a checklist for further investigation using other RRA and PRA tools.

How to use the tool

To use key informants field workers should:

- note down potential key informants who have particular knowledge about a subject or area. Such people are often met while building rapport;
- engage key informants in semi-structured interviews, participatory mapping, participatory analysis of aerial photographs, semi-structured walks, ranking, short, and simple questionnaires, time charts (seasonal diagrams) and forest profiles by rapid assessment;
- adopt the behaviours and attitudes of good RRA and PRA (see Part 2); and
- check the reliability of information collected through direct observation and cross-checking.

Cautionary remarks

- opinions collected from key informants may not be representative of all groups in the area
- key informants will not be able to provide reliable information about all areas or issues.

4 Interest Groups

People who share particular sets of interests make up an **interest group**. An interest group can be determined by differences in age, gender, ethnic group, wealth or status, or religious belief. Examples of distinct interest groups include:

- women who collect particular forest products;
- poorer farmers;
- richer farmers who often have trees on their own land; and
- shopkeepers who buy firewood.

The objective of working with interest groups is to collect information and gain useful insights into their distinct needs, interests and problems. Such information is essential when negotiating the collaborative management of a forest with forest users, when assisting the forest users to identify and resolve conflicts, and when promoting the rights of less powerful groups.

How to use the tool

When working with interest groups field workers should:

- prepare a checklist of potential interest groups;
- use the checklist when building rapport to identify interest groups. Note down in a field book the type of interest groups found and the names and addresses of potential contact persons;
- focus building rapport on particular interest groups;
- engage interest group members in semi-structured interviews, participatory mapping, participatory analysis of aerial photographs, direct observation, semi-structured walks, ranking, time charts (seasonal diagrams) and forest profiles by rapid assessment;
- adopt the behaviours and attitudes of good RRA and PRA (see Part 2); and
- check the reliability of information collected through direct observation and cross-checking.

Cautionary remarks

- it is not always possible to satisfy everyone's interests or to resolve every conflict
- avoid treating women as a single interest group. There are wide variations in wealth, status, caste, ethnicity, education and other characteristics between individual women.

Figure Part 3 -2 A field worker conducting a semi-structured interview with an interest group

5 Semi-structured Interviews

A great deal of valuable information can be obtained by talking to people about their situation and the things that interest them. This is called a **semi-structured interview** and it is one of the main tools used in community forestry. Semi-structured interviews can be used with individuals, key informants, interest groups and other small groups of local people. The objective of semi-structured interviews is to engage local people in conversations, usually prompted through a series of questions relevant to both the field workers and local people.

How to use the tool

To undertake semi-structured interviews field workers should:

- prepare a list of topics for discussion and note these topics in a field book;
- select individuals, key informants, interests groups or small groups of local people to interview who will provide a wide cross section of information and opinions;
- select times and locations where the interview is less likely to be disturbed;
- use the prepared list of topics as a checklist, but allow for flexibility in the conversation so that issues can be explored as they arise in conversation;
- ask questions that are relevant to the person or group being interviewed;
- use an open-ended questioning style that seeks explanations and opinions rather than a yes or no answer. For example, ask 'where do you collect fuel wood?' Rather than 'do you cut fuel wood from the government forest?';
- record the details of each interview in a field book;
- modify the list and the questions as new issues emerge and old issues become less critical;
- adopt the behaviours and attitudes of good RRA and PRA (see Part 2); and
- check the reliability of information through direct observation and cross-checking.

Cautionary remarks

- do not to take notes while undertaking semi-structured interviews until rapport has been built. People are often reluctant to talk freely if notes are taken. Write down key points after an interview is finished. Once rapport has been built seek permission from informants to take notes. After an interview explain to informants what has been written
- rural women are often busy, and they are often shy with strangers, regardless of whether it is a man or a woman. Field workers should be sensitive to the constraints facing women when undertaking semi-structured interviews
- avoid asking questions that are beyond the knowledge or experience of informants
- avoid giving opinions or using questions that may adversely affect the answers given. To be polite, local people will often agree with the opinions of field workers, even if they do not really agree.

Figure Part 3 -3 A field worker conducting a semi-structured interview with a key informant

6 Secondary Sources

The objective of using secondary sources is to supplement other techniques of information gathering in order to provide a richer picture of local conditions. Field workers can often gain access to a wide variety of secondary sources of information. Secondary sources of information include maps, local government records, MIS data, records held by the National Parks Office and other government agencies, national records (for example census data), records and local knowledge of NGOs and records held by individual farmers and farmer groups.

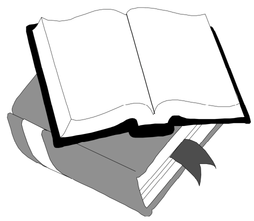
How to use the tool

Field workers should:

- seek out possible secondary sources of information and collect relevant data where possible;
- adopt the behaviours and attitudes of good RRA and PRA (see Part 2); and
- check the reliability of information through direct observation and cross-checking.

Cautionary remarks

- avoid collecting information just for the sake of it
- secondary sources may not contain information that is accurate or useable.



7 Sketch Mapping

The objective of **sketch mapping** is to use a simple, hand-drawn map to record a variety of information about local physical resource and social conditions that does not usually appear on published maps. While field workers may consult local people while they are preparing sketch maps, the process of sketch mapping does not necessarily require that local people be treated as partners. Sketch mapping is an RRA tool, not a PRA tool.

Field workers usually prepare sketch maps from their memory, or while in a location from where the area of interest is visible. Sketch maps should be drawn into a sketch book or field book in plan view (that is seen from above).

A sketch map can be used to record the:

- location of administrative boundaries;
- topography and hydrology;
- location and names of facilities (such as schools and water sources);
- location of villages;
- type and location of farmlands; and
- location, names and condition of forests.

How to use the tool

When preparing a sketch map field workers should:

- preferably select a location that provides a view of the area to be sketched;
- mark on the map the location name (map title), a north axis, a legend, the map maker's name and the date;
- sketch the major features of the landscape (ridges, rivers, roads) in plan view. By sketching these features first, the map is likely to have a slightly more accurate scale than if features are sketched randomly;
- try to avoid portraying nearby objects as large and distant objects as small;
- fill in the details required, trying to keep them aligned in respect to the positions they occupy in the landscape;

... continued

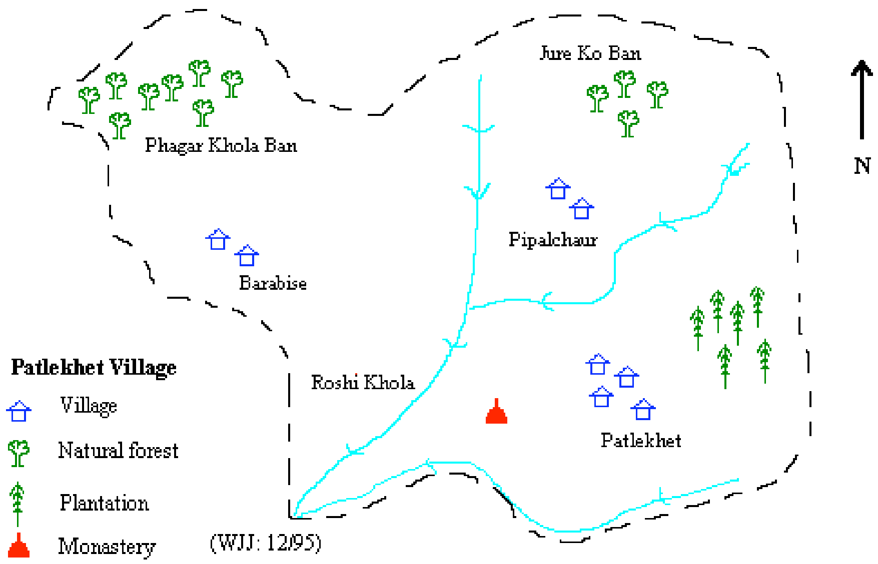
How to use the tool continued ...

- where possible write in names of prominent features, villages, roads, forests and other features that may assist later when trying to relocate the map with the site or trying to transfer the information onto a more conventional map; and
- check and recheck the validity of information using different sources.

Cautionary remarks

Sketch maps can be misleading as their scale is often less accurate than published maps and thus they tend to simplify reality.

Figure Part 3 -4 An example of a sketch map



8 Participatory Mapping

Participatory mapping is a form of sketch mapping. It requires field workers to collaborate with local people to prepare a simple, but informative map, or set of maps, that record a variety of information about local physical resource and social conditions. Like sketch mapping, a participatory map can be used for storing information that is not readily available from secondary sources, such as hydrology, land use, land tenure and infrastructure. Unlike sketch mapping, a participatory map is first drawn on the ground, a blackboard or large sheet of paper and then transferred into a field book or sketch pad. Participatory maps are usually prepared by local people with field workers acting as facilitators. This differs from a sketch map that can be prepared without the assistance of local people if necessary.

Participatory mapping can be used by field workers and to empower local people with the responsibility for managing community forests. Like sketch maps, participatory maps often have less accurate scale and boundaries than published maps. Accuracy can be improved by including sufficient information about the landscape (such as streams and ridges) on a participatory map. By doing this, details of the map can be matched with, and then transferred onto, a more conventional map.

A participatory map can be used to record the:

- location of administrative boundaries;
- location and names of facilities (such as schools and water sources);
- location of each village and the number of households and type of people that live there;
- type and location of farmlands;
- location, names and condition of forests used by local people; and
- use rights and use patterns of local forests.

The scale of a participatory map can vary from a small scale, general map of the area to a detailed, large scale map. A detailed map can be used to record:

- type and condition of individual forest patches, including planted areas;
- location of particular resources, such as water sources, non timber forest products; fuel wood and timber sources; and
- type, importance, seasonal use and source of forest products.

How to use the tool

To undertake a participatory mapping exercise, field workers should:

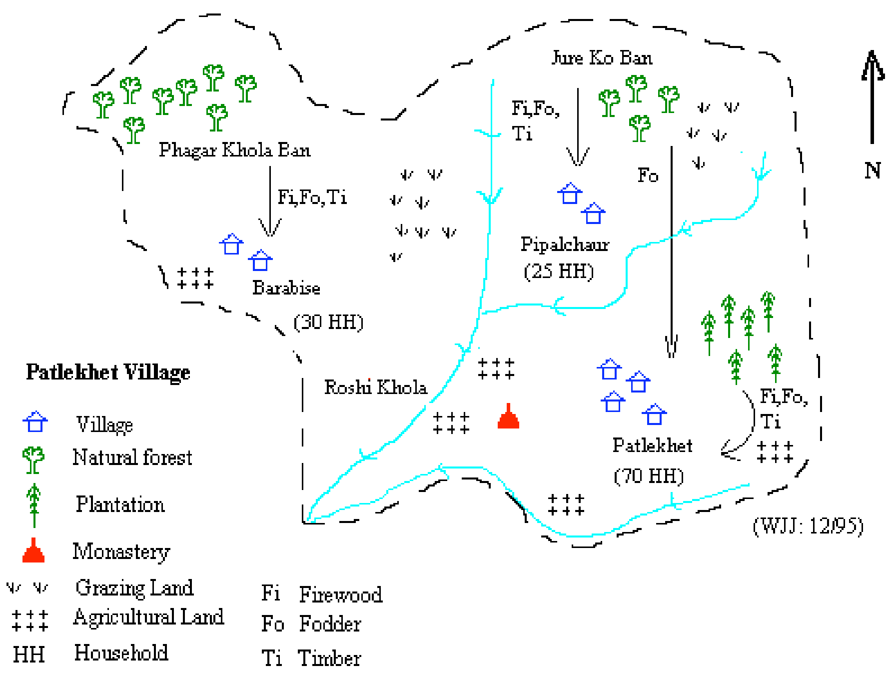
- decide on the area of interest and the scale of the map to be prepared;
- schedule participatory mapping exercises so that they fit in as far as possible with seasonal and daily routines of local people;
- choose physical surroundings where interruptions and distractions will be minimised, the ground is reasonably level and there is a view of the area of interest;
- gather a group of key informants, preferably both men and women. This is important because each group can have different knowledge of forest use patterns, and use rights;
- try to keep the mapping groups small and limit the number of field workers;
- start by describing the purpose of the map, then make a mark on the ground to represent a prominent feature of the landscape (a stream, ridge, path or road). Ask local people to name this feature, write the name onto a slip of paper and place the paper on the ground beside the mark that represents the feature;
- try to avoid dominating the process, by encouraging local people to build the map themselves by adding features such as streams, ridges, roads, settlements, forests and forest boundaries. Forests can be represented by handfuls of grass, weeds or leaves;
- when the map is completed, sketch the map into a field book (see Figure 3.5). Mark the location name, a legend, the map makers' names and the date on the map; and
- give the participants a copy of the map, or better still, encourage them to sketch a copy of the map themselves.

To improve the accuracy of a participatory map, the exercise should be repeated at other sites using different key informants. After each mapping exercise the field workers' copy of the map is adjusted by adding new information and discarding information that is inaccurate. Provided that sufficient features are drawn onto a participatory map, field workers can transfer the information to a topographic or other map and improve the accuracy of scale and boundaries.

Cautionary remarks

- develop a basic understanding of the area before undertaking a participatory mapping exercise. This can be done by group walks, informal interviews, direct observation and secondary sources (particularly from existing maps)
- participatory mapping can take a long time, be aware that local people can become frustrated with the process if you waste their time
- the scale of participatory maps is often inaccurate
- participatory mapping should not be used in isolation from other tools. Field workers need to cross-check the reliability of information with other RRA and PRA tools
- some groups of local people do not like to use participatory maps, particularly if they consider that drawing on the ground is inappropriate.

Figure Part 3 -5. An example of a participatory map



9 Participatory Analysis Of Aerial Photographs

Participatory analysis of aerial photographs is a similar technique to participatory mapping. An aerial photograph of the local area is used to stimulate discussion with key informants and small groups of local people. Aerial photographs can be used as interviewing tools for soliciting and recording spatial information (Fox, 1988:7). This can include information that is not readily available from secondary sources such as local names and land use. Participatory analysis of aerial photographs can provide valuable information for field workers, and can be used to empower local people with the responsibility for managing forests.

Aerial photographs differ in quality, scale and angle that the image was recorded. Photographs that have a scale of about 1:10,000 are usually referred to as large scale while aerial photographs with a scale of over 1:50,000 are considered to be small scale. Large scale photographs are usually more useful for planning at the level of an individual forest user group, while small scale photographs are better for more general planning. Most aerial photographs are taken from directly above the ground looking downwards, these are described as vertical aerial photographs. Occasionally aerial photographs are taken obliquely to give a view as if you were looking sideways and downwards from above.

Because aerial photographs represent a true image of an area at a point in time, they do not suffer as badly from problems of scale as do sketch maps and participatory maps. Once local information is added to an aerial photo it is a relatively easy job to transfer the information to a more conventional map, or to produce a simple sketch map based on the photo.

A participatory aerial photo exercise can be used to record the:

- location of administrative boundaries;
- type and location of farmlands;
- location of each village and the number of households and type of people that live there;
- location and names of facilities (such as schools and water sources);
- location, names and condition of forests used by local people;
- use rights and use patterns of local forests; and type, importance, seasonal use and: source of forest products.

How to use the tool

To undertake a participatory analysis of aerial photographs, field workers should:

- collect the appropriate photographs and drawing equipment;
- schedule participatory analysis of aerial photographs exercises so that they fit in as far as possible with seasonal and daily routines of local people;
- choose physical surroundings where interruptions and distractions will be minimised, and there is a view of the area of interest;
- gather a group of key informants, preferably both men and women. This is important because they can have different knowledge of forest use patterns, and use rights;
- try to keep the groups small and limit the number of field workers;
- describe the purpose of the exercise and show the photographs. Identify a prominent feature on the photograph (a stream, village, ridge, path or road) and ask local people to name this feature, write the name onto the photo using an erasable pen or wax pencil;
- encourage local people to identify, name and describe features such as streams, ridges, roads, settlements, forests and forest boundaries. Draw in arrows to show where local people collect their forest product needs. Ask questions that encourage local people to take control of the exercise; and
- at the conclusion of the exercise sketch a map from the features on the photo and give a copy of the map to the participants.

To improve accuracy the exercise should be repeated at other sites using different key informants. During each exercise the field worker’s copy of the map or photograph is adjusted by adding new information and discarding information that is inaccurate.

Cautionary remarks

- because aerial photographs are expensive, easily damaged and are sometimes difficult to obtain they should be stored and transported in an appropriate way
- aerial photographs are less useful in very steep areas due to distortions of land area and the effect of shadow on the photographs
- develop a basic understanding of the area before undertaking a participatory aerial photography exercise. This can be done by group walks, informal interviews, direct observation and secondary sources (particularly from existing maps).

10 Photographs

Although photographs are not a commonly used RRA or PRA tool they can be quite a useful tool for promoting discussion and confirming information.

How to use the tool

One useful method is to take photographs of an area of interest from a nearby vantage point, perhaps a hill or ridge, then to use an enlarged copy of the photographs, or a composite of several photographs, to facilitate discussion with and collect information from local people in the same way as described in participatory analysis of aerial photographs.

Another method is to collect photographs of subjects of interest, for example different species of trees found in a community forest. These photographs can then be used to facilitate discussion on the use of particular species. These are only two suggestions, there are numerous other ways in which photographs can be used.

Cautionary remarks

Photographs are easily damaged and relatively expensive. Field workers need to take considerable care to ensure that the photographs are stored and transported in an appropriate way.

11 Direct Observation

Direct observation is a very useful tool for collecting information. Observations can be made opportunistically as field workers travel around their area, or they can be made deliberately during a visit to observe specific situations or activities first-hand.

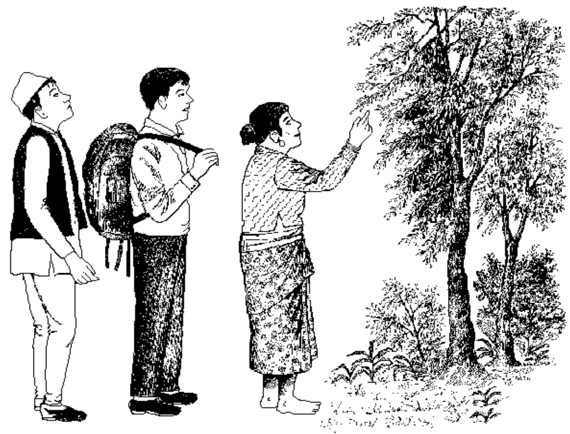
The objectives of direct observation are to:

- make qualitative or quantitative appraisals of relevant physical and social conditions; and
- cross-check information that has been collected using other tools.

Direct observation is particularly important because misunderstandings can occur if local people provide information that does not match with what is seen. Discrepancies can occur if local people have not completely understood what was being asked, usually because the questions were poorly phrased, too complex, or too general. By comparing direct observations with the information collected from other sources, additional questions can be posed to fill in any gaps in knowledge of local conditions. This increases the accuracy and reliability of the information obtained.

Direct observation can also reduce the number of questions that need to be asked of local people. For example, there is little point asking a person if they are old and poor if the field worker can readily see for themselves that the person is old, underfed, wears old and tattered clothes and lives in a small and poor-looking house.

Figure Part 3 -6 A field worker directly observing a forest with some forest users



How to use the tool

To directly observe, field workers should:

- prepare a checklist of topics for observation and note these topics in a field book;
- look carefully and systematically at what is happening in villages and forests and take notes about the issues and topics that are listed on the checklist;
- use the prepared list of topics as a checklist, but allow for flexibility so that issues can be explored as they arise;
- undertake observations at various times of the day, week, month and year to reduce potential biases associated with the timing of observations;
- cross-check observations with information obtained through other methods;
- when observations contradict information gathered by other methods, cross-check; and
- adopt the behaviours and attitudes of good RRA and PRA (see Part 2).

Cautionary remarks

- Undertake calibrations of local measures of product use to allow information collected from different sources to be converted to standard weights or volumes;
- Potential biases can occur due to the timing of observations and the effect on behaviour of the presence of a field worker.

12 Semi-structured Walks

Semi-structured walks are a combination of semi-structured interviews and direct observations undertaken during joint inspections with key informants, interest group members or other knowledgeable local people. The tool can generate much useful information and discussion because observations made during such walks can be used to stimulate, challenge, and focus interviews, giving rise to exchanges of information that might not have occurred otherwise.

A transect walk is another type of semi-structured walk. Transect walks are more structured in that they are planned to include visits to locations that represent a range of situations or settings. Usually this is done to capture information along some ecological, physical or social gradient, thus producing a cross-section of conditions in a particular locality.

How to use the tool

To undertake semi-structured walks, field workers should:

- select times when a semi-structured walk is less likely to cause disruption to local activities or be disturbed;
- locate key informants and other knowledgeable people who are willing and able to walk around the area and who will provide a cross-section of information and opinions;
- explain the general aim of the exercise and agree upon the purpose of the walk before setting out. Usually this will involve assessing the composition and condition of local forests, determining what products are available from these forests and reviewing who uses the forests and where they live. Alternatively, walks can be planned to analyse the condition of private forests and agricultural lands, common grazing lands or settlements. Field workers should allow for flexibility during the semi-structured walk so that issues can be explored as they arise in conversation or through direct observation;

....continued

How to use the tool continued ...

- while undertaking the semi-structured walk, ask open-ended questions that seek explanations and opinions rather than yes or no answers. For example, ask 'What are the most important fodder trees in this area?' Rather than 'Is *Ficus* the most important fodder tree?' Field workers should show genuine interest and encourage the users to explain what is being observed along the way;
- record the details of observations in a field book, and on a transect diagram or sketch map;
- adopt the behaviours and attitudes of good RRA and PRA (see Part 2); and
- check the reliability of information through direct observation and cross-checking.

Cautionary remarks

- village women are often busy with farming and household tasks, and they are often shy with strangers, regardless of whether it is a man or a woman
- avoid asking questions that are beyond the knowledge or experience of the person or group being interviewed
- avoid giving opinions or using questions that may adversely affect the answers given. To be polite, local people will often say they agree with the opinion of the field worker, even if they do not
- avoid treating the agenda as fixed and avoid asking questions according to a strict structure or sequence.

13 Ranking

Ranking is a useful tool for inquiring into the nature of local preferences and for helping local people to set priorities for forest management or other activities. Ranking exercises can be undertaken with individuals (key informants or other knowledgeable local people), interest groups or with groups that represent a mixture of interests. Ranking exercises are often conducted on the basis of gender to determine different preferences between men and women.

There are several ways in which ranking can be undertaken. For less complex issues local people can be asked informally to rank items or issues during semi-structured interviews. For more complex issues ranking can be undertaken by using pair-wise ranking or a matrix table. Pair-wise ranking is often simpler than ranking all items at once as it avoids the confusion that can sometimes arise with having too many items to rank at the one time.

An example of pair-wise ranking

To obtain information about the nature of local people's preferences for fodder trees the field worker can begin with a pair-wise ranking exercise. This is done by asking a local person what are the six most popular fodder trees grown locally. A pair-wise ranking chart is prepared showing the six species on both axes. The field worker then works through each combination of pairs by asking the local person to nominate and explain their preference. Each selection is written down in the space provided until the chart is complete (see completed chart below). By adding up the number of times each species is mentioned the field worker can develop an idea of the most preferred local species. However, the real value of the pair-wise ranking exercise lies not in the absolute ranking but rather in the opportunity that arises for the field worker to ask questions about why the local person chose one species over another. By doing this the field worker can build up an idea of what attributes of fodder trees the informant considers to be important. For example, the informant may prefer a species because it is easy to grow, it grows rapidly, it can be harvested repeatedly, it does not shade crops, it is available from a local nursery, it is nutritious for livestock or a host of other reasons. Eliciting this sort of information is often more important than the score that is obtained at the end as it provides a useful insight into the nature of local preferences. It also provides a starting point for a matrix ranking exercise as shown below.